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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,805	10/29/2001	John P. Spoonhower	83373F-P	2696

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Milton S. Sales
Patent Legal Staff
Eastman Kodak Company
343 State Street
Rochester, NY 14650-2201

EXAMINER

ANGEBRANNDT, MARTIN J

ART UNIT

PAPER NUMBER

1756

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/045,805	SPOONHOWER ET AL.	
	Examiner	Art Unit	
	Martin J. Angebrannt	1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/29/01 & 04/11/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-4, 20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-19 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-26 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/29/01</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-4 and 20-21, drawn to methods of recording analog and digital information on optical recording media, classified in class 347, subclass 244+.
 - II. Claims 5-19 and 22-26, drawn to a black optical recording medium capable of recording both digital and analog information, classified in class 430, subclass 270.11.
2. Inventions group II and group I are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the data may be recorded simultaneously using conventional far field recording and/or separately using near field recording as well as the media may be used to record only one of digital or analog information.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Frank Pincelli on September 13, 2005 a provisional election was made without traverse to prosecute the invention of group II, claims 6-19 and 22-26. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-5 and 20-21 are withdrawn from further

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consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5-8,10,12 and 22-26 are rejected under 35 U.S.C. 102(a) as being fully anticipated by Kobayashi et al. JP 2001-184691.

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Kobayashi et al. JP 2001-184691 teaches a bilayered optical recording medium which has two different recording layers formed on the same side of a disc substrate (see figures 3 and 4). The diaryl ethenes are inherently fluorescent.

As the claims are directed to the unrecorded medium, the type of data is considered an intended use limitation, beyond the ability of the medium to record both digital and analog information. As the claims are directed to the unrecorded media, the limitations of claims 22-26 are lessened as these are intended use. This ability to record both type of data is considered inherent.

9. Claims 5-6,9,10,12,22,23, and 25-26 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Mizutani JP 01-144247.

Mizutani JP 01-144247 teaches with respect to figure 1g, a disk substrate coated with a photographic emulsion. This is then contact exposed in figure 1h (contact exposure inherently being a near field process due to the proximity of the masking element , X).

10. Claims 5-6,9,10,22,23, and 25-26 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Stevens '587.

Stevens '587 teaches with respect to figure 1, a substrate coated with a photographic emulsion, which is then exposed using a floating head through a solution of index matching fluid. (2/36-58).

11. Claims 5-6, 9-12 and 22-26 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Pardee et al. '989

Pardee et al. '989 in example 1, a color movie film photographic emulsion is lubricated and then attached to a disc substrate. (5/32-49)

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The examiner holds that a non-photosensitive layer is outermost on the film, the color film has plural emulsions stacked atop one another and this inherently is a protective layer.

12. Claims 5-8,10,22,23 and 26 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Hamano et al. "Rewritable Near filed optical recording on photochromic films", Jap. J. Appl. Phys, Vol 35 (pt 1, No 3) pp. 1764-1767 (1996).

Hamano et al. "Rewritable Near filed optical recording on photochromic films", Jap. J. Appl. Phys, Vol 35 (pt 1, No 3) pp. 1764-1767 (1996) teach a single layer optical recording medium on a substrate (see figure 1 and section 3). The diaryl ethenes are inherently fluorescent.

13. Claims 5-8,10,22,23 and 26 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Numakura JP 59-005248

Numakura JP 59-005248 teaches a substrate coated with a photochromic material, which is then exposed using a contact exposure process with mask 3. (figure 1a-c).

14. Claims 5-8,10-12 and 22-26 are rejected under 35 U.S.C. 102(a) as being fully anticipated by Ogura JP 2001-076382. (machine translation attached)

Ogura JP 2001-076382 teaches a bilayered optical recording medium which has two different photosensitive layers formed on the same side of a disc substrate, a disk substrate, an Al reflective layer (25), a tracking layer (24) formed of spiropyran (a photochromic material), a spacer (23), a diarylethene photochromic recording layer (22) and a protective layer (21) is 10 nm thick. ([0029-0032] and figures). The diaryl ethenes are inherently fluorescent.

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15. Claims 5-8,10,12 and 25-26 are rejected under 35 U.S.C. 102(e) as being fully anticipated by Weiss et al. '679.

Weiss et al. '679 teach a disk coated with a photochromic recording layer where one of the isomers is more luminescent (fluorescent) than the other (2/59-3/20).

16. Claims 5-6,8-14,16-19 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. '627 and Russell '704.

Russell '704 establishes photographic emulsions based optical recording media are old and well known. These include embodiments where color film is placed on one side of both sides of a substrate and include a protective layer. (7/60-8/15). The same is taught for luminescent materials.

Lee et al. '627 teach that double sided media have double the storage capacity of single sided media. (2/56-65). The protective layers are thin on the order of 40-80 nm to allow near field recording (10/18-36).

It would have been obvious to modify the teachings of Russell '704 which use color film to form multilayered optical recording media on either one a both sides of a substrate by using thinner protective layers as taught by Lee et al. '627 to allow for near filed recording.

17. Claims 5-19 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. '627 and Russell '704, further in view of Ogura JP 2001-076382.

In addition to the basis provided above, it would have been obvious to modify the combination of Lee et al. '627 and Russell '704 discussed above by using layers of photochromic materials, such as the layered structure of Ogura JP 2001-076382 in place

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of the photographic film to allow the resultant medium to be re-recordable/erasable and therefore reusable.

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Irie et al. 2002/0034705 is an English equivalent to JP 06-267071 and both teach near field recording with photochromic materials.

Zenzefflis '759 teaches discs of photographic materials.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J. Angebrannt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Martin J. Angebranndt', written in a cursive style.

Martin J Angebranndt
Primary Examiner
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09/15/2005